

A CONVENIENT TRUTH

Family farmers can feed the world

Many are convinced that we need industrial agriculture to feed the world, that there is no other way. But they believe that too easily. The truth is that family farmers can and do perform far better than the agro-industry.

“Continuing along the current path is not an option”

Criticisms against modern agriculture today are widespread and well argued. Just recently, on 15 April 2008, a study was presented on the state of global agriculture (1). At the request of the World Bank and the FAO, four hundred scientists worked on this report for three years. Their conclusion: Continuing along the current path is not an option. Science and technology have brought about sharp increases in productivity. But the profit gained from that has been spread unevenly. Furthermore, the environmental consequences and the social cost have proven to be unbearably high. That is why, according to these scientists, agriculture needs to adopt a different approach and become a lot more discerning about the technology it employs. We need to protect our environmental capital made up of things such as soil and water and work towards achieving agro-ecological agriculture that uses natural fertilisers and traditional seeds, that lets nature run its course and that reduces the distance between agricultural production and the consumers.

Is that really possible? It certainly is. Worldwide there are 2.5 billion people living from agriculture – male and female farmers and their children. Everywhere where these farming families have access to sufficient and good land and to the means to invest in productive agriculture, they simply do an outstanding job. They are perfectly capable of providing sufficient food for the entire world. Additionally, this form of agriculture generates profit that is much more equally distributed and it is far less detrimental to the environment.

Family farmers perform better at production

A short trip around the world provides convincing arguments. In many regions small and medium-sized farms produce food for the local and national markets. And they have proven to be capable of being more productive and more efficient than the large industrial export companies.

Take Brazil, for example, mainly known for its agro-industrial export of soy, meat, sugar and so-called biofuel. But fortunately – especially in southern Brazil – there are also flourishing family farms. Areas where the land is too hilly and therefore not suitable for soy monoculture are characterised by a large diversity of crops. Let us allow the numbers speak for themselves. (2) Out of all the farming enterprises in this vast country 85 percent are family farms. They hold only 42 percent of the land. And, more importantly, they succeed in producing almost forty percent of the entire agricultural production and over half of the basic food production.

Critics may comment that family farmers may perform just as well as industrial agriculture, but not better. However, we need to take into account that forty percent of those family farms are only producing food to survive, do not generate any financial income and hardly participate in the market or not at all. They have too little capital in order to be able to work efficiently.

It therefore makes more sense to compare the agro-industry with the one third of family farms that does have access to the necessary means. And we can learn a lot more from this comparison, as this group of farmers accounts for the majority of the production of family farms. Their productivity is markedly higher than that of the agro-industry. In other words, if enough investments are made in family agriculture, it performs significantly better than the agro-industry.

And when it comes to farmers earning a living from their jobs, family agriculture scores beyond comparison. At present, soy beans account for 42 percent of agricultural production in Brazil, taking

up 45 percent of all corn fields... while only providing work to just 5.5 percent of farmers and agricultural workers. (3)

All the more reason to choose family agriculture. That is why Vredeseilanden supports Fetraf, an organisation of family farmers with 750,000 member families. This movement strives for interaction with politics, society and the economy, which makes for such an interesting story, we cannot leave it out of this article. Fetraf – which stands for the federation of workers in family agriculture – sees itself first and foremost as a union organisation that defends the interests of its members and it is also integrated into the largest trade union federation in Brazil, the CUT. It has also developed a long-term outlook for the economy that inspires it to elaborate initiatives for the destructive agro-industry and wholesale distribution. Its members strive for as much self-sufficiency as possible and produce for the local and Brazilian markets. Additionally, they do not want to restrict themselves to production only, but also want to sell their produce. To this end they attempt to come into direct contact with the consumers, their customers. At the same time, where possible they also want to process their agricultural products into products that are worth more, e.g. cheese and wine instead of milk and grapes.

Their ambition is to become economically independent and to take over the entire food chain, from farmer to consumer. In order to support these economic activities they have organised themselves into cooperations, ranging from small-scale cooperations that organise a farmers market and set up a farmers shop in town, to large cooperations that bring electricity to rural areas or even take over a bankrupt state milk factory, thereby beating a multinational to it and delivering milk to supermarkets. Their credit cooperation is present throughout Brazil, but especially so in the states in the south and the northeast. It is of vital importance to farmers who need money to invest. But Fetraf's vision and activities stretch far beyond that. It wants a sustainable alternative, also as far as the environment is concerned. So it has opted for agro-ecological agriculture, without pesticides. Thirdly, Fetraf also wants to exert strong influence on political representatives and enforce government policy that takes into account the interests of family farmers and offers their economic alternatives the right opportunities and support. It is extremely interesting to see how it has succeeded in getting the family farmers to become suppliers for the *Fome Zero* government programme that aims to eradicate hunger in Brazil. That makes it a win-win situation for both the farmers in rural areas and the poor in the cities. Fetraf does not want to limit itself to exerting influence in the area of agriculture, it also strives for good government policies in other social areas such as education. (4)

Let us now look at another part of Latin America, in the tropical regions, where family farmers often grow several different crops on one field. This is a common practice, as forty percent of cassava, up to sixty percent of maize and even eighty percent of beans are being grown in combination with other crops. In other words, the most important food crops. Research has shown that these farmers produce yields that are twenty to sixty percent higher than those produced using monoculture in industrial agriculture. Again this approach results in more jobs so more people can earn a decent income. (5)

Even in the harsh mountainous area of Cañar in Ecuador, groups of female farmers are proving that they can make a decent living by selling healthy vegetables in their region and in the largest city in the area, Cuenca. They grow all their crops in an environmentally friendly way, respecting the vulnerable mountain soil. The 170 male and female farmers of Chuya Mikuna – a partner organisation of Vredeseilanden – form an example of an economic system that tries to obtain a balance between supply and demand. The findings of this pilot project will be used in other regions.

Family agriculture – a cornerstone for successful societies

Let us now travel to Asia, by far the most populated continent. That is where the most impressive results of the last few decades have been achieved. Between 1981 and 2001 China has succeeded in releasing 500 million people – half a billion – from poverty. This is first and foremost thanks to



agriculture and the rural areas, where over that period poverty levels dropped from just over three quarters of the population to twelve percent. The secret behind this success is complex. The Chinese farmers – small family farmers – were given more rights on their land, the government is offering better prices for their produce and they also benefit from a partially liberalised internal market. (6) Everything centres around respect for family agriculture. This has resulted in an almost unbelievable increase in production, much faster than the population increase, and in productivity.

This revolution that is making agriculture increasingly more profitable offers new opportunities to invest in industrialisation by freeing up people and financial means. And for an emerging industry flourishing rural areas have the highest sales potential. That is also what happened before in Taiwan and South Korea, where the protection of agriculture and its subsequent success led to these countries developing into industrialised welfare states in no time. (7)

Vietnam is more or less following in their footsteps. It is not surprising therefore that this country focuses on its own food security. In time this will become threatened by the fast industrialisation and the equally fast expansion of the cities. That is why Vietnam no longer wants this expansion to happen on the best agricultural land, but in the less fertile and/or more hilly areas. That is also why the government is restricting the export of rice, the staple food of the Vietnamese. Hence they decided to export a maximum of 3.5 million tonnes of rice in 2008 and not 4 or even 4.5 million tonnes. The idea is to lower the pressure on prices and make sure a bowl of rice remains affordable for all Vietnamese citizens.

Sustainable rice cultivation results in higher yields and higher incomes

In Flores, in the Manggarai Barat District, farming families have been introduced to Farmer Field Schools (FFS) by Vredeseilanden and local NGO Yakines. This project started in 2002 with a group of fifty people but has now managed to capture the interest of almost the entire village. Through these Farmer Field Schools they have now succeeded in considerably increasing the yield of and return on their agricultural production and – most importantly – in building a foundation for a sustainable future.

Rofina Jenia, a female farmer from the village tells us that through small-scale experiments they have found new ways of planting rice. “We used local rice seed and did not use any chemical inputs or pesticides. We used cow manure and green manure. As pest prevention we sprayed the crops with leaf and root extracts that we also use as natural medicines.”

“After a few years not only the production costs had been reduced by 20 to 30 percent,” she continues. “Also the yield increased from 4.5 tonnes per hectare to 5.2 tonnes per hectare.” The members of the group worked together in order to learn from each other’s experiments. This meant that they soon started to organise themselves and to build communal rice storage depots. “From that time on we were self-sufficient and able to grow our own food on our own land,” Rofina says. “The next step was growing organic rice,” she says. “Organic rice gets a good price on the market, which is 15% higher than that of ordinary rice.”

Local NGO Yakines has received support from Vredeseilanden and has directly reached over 3,000 farming families in the Manggarai District in the past four years, using training methods aimed at sustainability, higher yields and cost reduction in agriculture. Agriculture by the people for the people, based on environmental principles is perfectly capable of ensuring food supply and generating a decent income for male and female farmers with limited financial means.

A number of villages in the area around Tambacounda in Senegal are also investing in development by investing in agriculture. In the early 1980s a group of farmers saw the opportunities that growing bananas had to offer and established the farmers organisation Aprovag. No plantations, but groups of family farmers turning the cultivation of bananas into a profitable activity. At present, Aprovag has 1050 members and the organisation continues to expand. This initiative is gradually also starting to benefit the rest of the region. New villages are being founded by immigrants who no

longer need to risk crossing to Europe and have come to see the new opportunities agriculture has to offer. "One of our friends left for Europe and after one month Spain sent him back. He works here now. You don't need to risk your life here. If I ever were to go to Europe it would be to learn more about bananas," says one of the migrants in the village of Bady. Vredeseilanden is now offering support to the organisation among other things to help it look for processing options for bananas and other fruit grown in the region.

European agricultural model

The industrialising Asian economies owe their success in part to the protection of high-performance mainly family-based agriculture. This success did not happen overnight. If we go back in time, we see that the European countries took the same road before them. They too had to go through an agricultural revolution and they continued to respect family agriculture to a large extent. That is how they were able to use the profit from that sector to invest in industrial development, always keeping the balance between the industry, the rural areas and the rural economy in mind. It is in Europe's best interests to make sure its family agriculture remains healthy, as it is capable of feeding the European population. Something that is extremely important in times of increasing food insecurity in which it is not advisable for Europe to put all its trust in the world market for supply. Growing most of Europe's food in Europe is also more environmentally responsible than relying on foreign agro-industrial agriculture that is more harmful to the environment. Furthermore the latter would mean taking away food from the poor in the South. Most Europeans are perfectly able to pay for that food, while the poor in the slums in the South are finding it very difficult or even impossible.

An abundance of vegetables in Eastern Congo

Also in an unstable region such as Eastern Congo, investing in family agriculture is proving to be advantageous and makes a big difference to a population that has undergone the devastation of war. The cooperative organisation Coocengi (7700 members), farmers union Sydip (14116 members), and agricultural organisations Apav and Apader have been receiving support from Vredeseilanden for a number of years. They make a difference in the region around Butembo. Apader has concentrated on the cultivation of rice. The quantities produced now are more than enough to feed the farming families and have enough left for export. Everywhere in the surrounding villages and even on the markets in the city of Butembo, people are talking about 'APADER rice'. Slowly but steadily the clay huts are being replaced by stone houses with a more solid metal roof.

Farmers organisation Apav has a 'vegetable garden' with trial fields. The variety of vegetables, fruit and herbs grown there is impressive: broccoli, lemon basil, leeks, papaya, coriander, fennel, tomatoes, pineapple... And all that in the middle of poor Eastern Congo. There is an abundance of different crops. The APAV team keeps detailed records of which varieties grow well, and especially of which varieties produce new seeds. Those varieties are the most interesting ones to distribute among the population. They can hardly keep up with demand.

The area has become a training and study centre where the 15 employees of APAV are continuously working to improve the most interesting and productive crops. That knowledge can be passed on in the training sessions organised by Sydip.

Family farmers perform better overall than industrial agriculture

Family agriculture is producing much more per hectare than industrial agriculture. It is significantly more productive, as we already know. But that is not all.

Whereas large-scale agro-industry leaves the farmers to die and does not care about the population in the neighbouring cities, high-performance family agriculture performs beyond comparison. Family agriculture to a great extent drives economic development and welfare in regions where it is allowed to play a leading role, as the income gained from it is largely spent in the surrounding region. In areas where mainly family farms do well, the neighbouring cities flourish too: there are more local

businesses, more surfaced streets and pavements, more schools, parks, churches, clubs, and newspapers, better service provision, more jobs and more participation of citizens in community life. This has been shown in several studies, the oldest of which dates back to California in the 1940s. And it still doesn't end here, because if this kind of agriculture applies environmentally friendly methods, it also takes better care of the environment. Agro-ecological agriculture reduces external inputs (cattle feed, chemical fertilisers and pesticides) to a bare minimum. Its energy balance is much more positive, it makes much more economical use of the limited water supply and increases soil fertility. And yet it still produces more than modern high-tech agriculture that completely relies on external inputs. (8)

So this is a convenient truth that we should rejoice about: family farmers can feed the world, today, tomorrow and in fifty years' time. And all this in a sustainable way. Such is the power of family agriculture.

Vredeseilanden

(1) International Assessment of Agricultural Science and Technology for Development (IAASTD), *Report on the state of global agriculture*, 15 April 2008

IAASTD was founded by the World Bank and the FAO on the occasion of the World Summit on sustainable development in 2002 and is also supported by Unesco.

http://www.agroeco.org/doc/new_docs/Calif-altagr.pdf

(2) da Veiga J.E. (full Professor, Department of Economics, University of São Paulo, Brazil), *Poverty alleviation through access to land: the experience of the Brazilian agrarian reform process*, 2003

www.fao.org/docrep/006/j0415t/j0415t07.htm

(3) ActionAid International, *Hungry for solutions. Progress towards securing the Right to Food Ten Years after the World Food Summit*, 2006, see p.74 and other pages.

http://www.actionaid.org/assets/pdf/HungryforSolutions_2112006_112539.pdf

(4) Barrez Dirk, *Koe 80 heeft een probleem. Boer, consument, agro-industrie en grootdistributie*, EPO & Vredeseilanden et al., 2007, 254 p.

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(5) Altieri Miguel en Nicholls Clara, *Agroecology And The Search For A Truly Sustainable Agriculture*, University of California, Berkeley, 2005, 291 p., see p.150-151 and other pages.

<http://www.agroeco.org/doc/agroecology-engl-PNUMA.pdf>

(6) World Bank, *World Development Report 2008. Agriculture for Development*, see p.46 and other pages.

(7) Barrez Dirk, idem

(8) Rosset Peter M. , *Food Is Different. Why We Must Get The WTO Out Of Agriculture*, Zed Books, London, 2006

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